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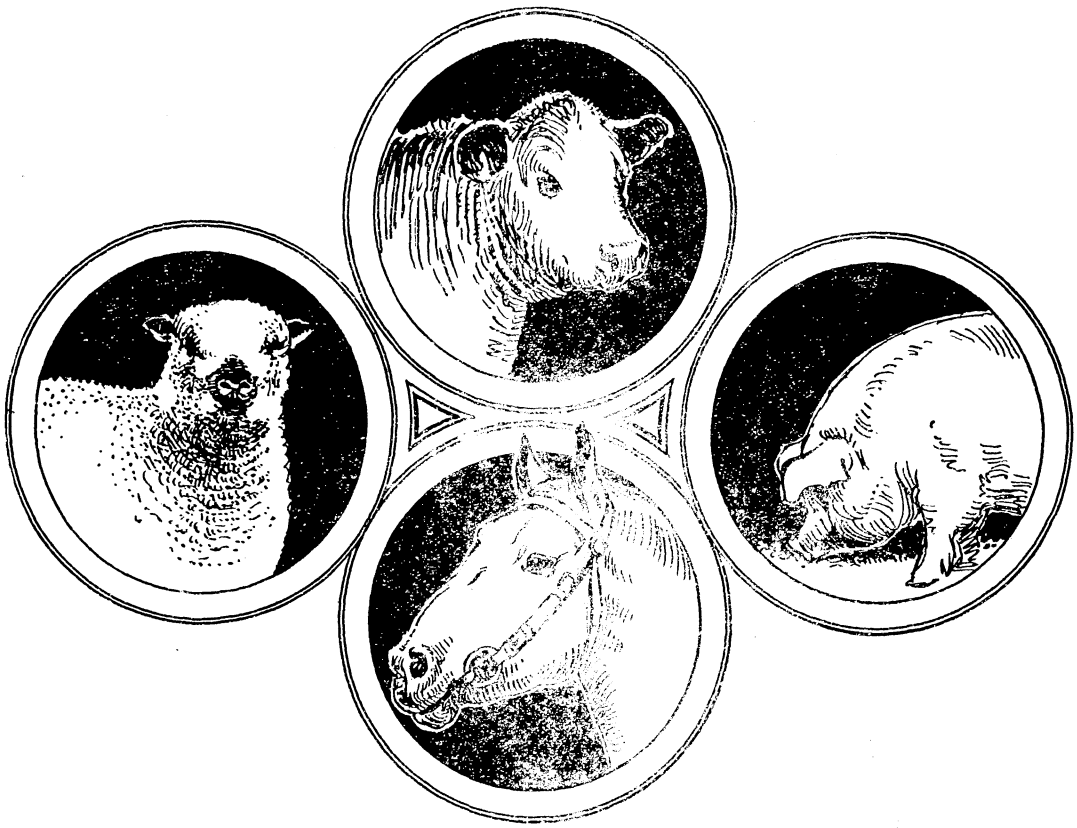
The EXTENSION ANIMAL HUSBANDMAN



UNITED STATES DEPARTMENT
OF AGRICULTURE
WASHINGTON,
D.C.

Serial No. 1 March 1926

THE EXTENSION WORKER.

Have you lived the life of a farmer,
Begun work with the rising sun?
Have you noted the modest income
That was his when the year was done?

Have you sat in the family circle,
Planning the crops for a coming need,
And noted the hope eternal,
That's part of the farmer's creed?

Have you seen him at work in the furrow,
Shared his joys at the family hearth,
And felt the truth of the saying
That he is the salt of the earth?

Away from the crowded city,
Alone with his flock and herds,
Refreshed by the winds of Heaven,
And the music of singing birds.

He finds growth for the soul within him,
Sees life in the o'erturned sod,
And while tilling the crops he has planted,
He humbly walks with his God.

Have you been an extension worker?
Have you ever felt the call?
Doesn't it stir the blood within you
To be a part of it all?

Dr. C. B. Smith.

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C.

THE EXTENSION ANIMAL HUSBANDMAN

Issued by the Bureau of Animal Industry and the
Office of Cooperative Extension Work Cooperating.

Serial Number 1 -- -- March 1926

Announcement

This is the initial number of "The Extension Animal Husbandman". It is intended to be the "family paper" for those who are actively engaged in animal husbandry extension work, under the provisions of the Smith-Lever Act of Congress.

The plan is to issue it "semi-occasionally" depending upon the availability of material and time for working it into suitable form.

Numerous State workers have expressed a desire for such a publication and it is hoped that with the whole-hearted support of all, it may be made to serve our common cause in a satisfactory manner.

There will be no fixed policy as to what will be included in these pages, the idea being to make it serve as a medium through which all members of the "family" may become better acquainted, exchange ideas and otherwise contribute to the general welfare of the work and the workers.

In the current number there is included an article by A. B. Graham on "Some Fundamentals of Extension Teaching", which will be of general interest, a summary of the ton-litter work for 1925, an outline of the Minnesota carload baby-beef project, a progress report on the Oregon wool-improvement project, as well as some other brief items.

If you like the idea, do not hesitate to say so, but what is more important, give us your suggestions as to how it may be improved and submit articles and reports of timely interest for publication. The venture is largely in your hands and your help will be appreciated.

C. D. Lowe.

SOME FUNDAMENTALS OF EXTENSION TEACHING

By A. B. Graham,

Specialist, Office of Cooperative Extension Work

THE PURPOSE OF TEACHING

At the outset it is desirable to call attention to something as old as the hills, and that is the fundamental teaching principles, which lead from the known to the related unknown, from the concrete to the abstract; to start with a simple practice and let the people get that before taking up something else; to instruct them to do the thing and then find out why afterward. College appeal is made the other way - discussion and then laboratory work. But the great mass will usually work from an existing practice back to the reason for it, or the underlying principles. Then the next step is in working from the simple practice to the complex performance.

Thus, to teach more successfully the things in keeping with men's needs, we must know their mental characteristics.

The purpose of a teaching process is to guide the mind of a person to do a thing better than he has done it before. Among extension forces knowledge of a person's manner of expression and personal characteristics is necessary in order to cause this thinking and acting to be in harmony with best practices.

In olden days the country doctor jumped on his horse or into his buggy, went out to see his patient, diagnosed the case, left some pills or powders wrapped in slips cut from a newspaper, and departed, having given more directions as to what was best to be done along the lines of nursing, perhaps, than as to effects that the medicine might have on the patient. In that day medical students went to school for about six months and then came before the world to practice. They based their practice on what they knew to be best at that time.

The time has come, however, when all of the medical colleges of good standing give four-year courses in the science of medicine, including courses in applied psychology, the theory of hypnosis, the power of suggestion, and many other things that have to do with the psychological aspects of man. All this is deemed essential in order to practice medicine, which requires specific diagnosis of the peculiarities of the individual. Doctors are aiming to influence both the mind and the body toward right conditions, and in order to change existing conditions, they must bring the patient back to the real, the natural attitude. The physician has therefore brought many phases of science to bear upon his practice. The lawyer has done the same; likewise the manufacturer and the lecturer. The extension teacher

has a job equal to the physician's and the lawyer's in this respect, because he must make a like appeal to the person, and not only to one person, but to a group of people.

NATURAL CHARACTERISTICS OF MAN.

There are certain appeals that we must make to certain people. The same stimulus, the same instruction, the same demonstration, will not always affect to the same degree, for all of the men in a group are not able to analyze or to get the same features out of a lesson. There are those who are more advanced in their power to think and better able to digest and to put the new thing into practice. But these may be relatively few in number, and our appeal to the others needs to be made in different terms. Only a small number of a group have the power of thinking from principle to practice, or can take a number of principles and apply them in developing complex practices. This group who think from the principle to the practice is a small percentage of persons.

Even those who may be very intelligent along some one or few lines, whether gardeners, livestock men, or what, are frequently back again in the class with the large group in regard to some ordinary commonplace things. These people may be more directly comprehensive of certain conclusions than others. The great mass, therefore, must be appealed to not only through their reason, but through certain major, basic instincts.

Instincts as a Factor in Extension Teaching.

It is desired to mention some of the essential points in making an appeal. Attract attention, interest, confidence and desire, but also bring about decision and action, for these must be gained before the appeal is completely consummated. This is best gained when approached through bringing about the sense of joy, or pleasure. Make the people feel that they will be glad if they do that thing, and the good habit will soon follow.

Gregariousness.- Man is a social, group-loving animal; he must be where others are. We find another characteristic that must be taken seriously into consideration in extension teaching, which is that man is also an imitative animal, and impelled to do things that others do. For example, men all wear collars; not always the very same kind of collars, but they all have the same general style. There are thousands of commonplace

things of life to which we are responding through the imitative instinct. We must use the crowd-loving characteristic in order to secure most satisfying results from a lecture, an automobile tour, a field meeting, or other extension activity in a community. The object lesson, a demonstration, let us say, will have much the same effect upon the whole crowd. The crowd in the automobile tour all go to the same place, and each of them bring back very much the same ideas, yet not exactly the same. There may be that slight differentiation that in the end makes the real lesson more prominent. But with a fuller knowledge of the many influences that get abroad into crowds or on trains or in meetings, we take advantage of the group-loving tendency of the people in order to get a general practice established in a community, for they all, more or less, will receive a stimulus.

Self-Preservation.- To speak of appealing to our instincts doesn't mean that we are entirely like the lower animals. One of those instincts is that of self preservation. If I were making an appeal to a mother as to the improvement of her child's health, or of her own health, or of the family's health, I might say, "Perhaps they should eat more vegetables, because eating vegetables will prolong life". Everybody would like to live to be a hundred years old. A recently displayed sign read "Drink buttermilk and live to be a hundred". I do not know how much truth there is in that, but the sign itself was all right because of two things- the suggestion to drink buttermilk, and by doing that, live to be a hundred. That appeals to the instinct of self-preservation which each of us naturally has. We all want to see our families and those in whom we are directly concerned live as long as possible. We want the health of the whole community improved. "Weigh these children and let's see how much improvement they will make in six months' time if they drink milk" is advised by the nutrition specialist. That is one of the direct appeals; we do not wish to go through all of the farmers' bulletins and circulars for this advice. We want simple suggestions of what to do that the life may be prolonged.

Ego.- We have also an egoistic instinct, a desire to be known by our fellowmen. It is well, in our extension work, if we can go on a tour or into a home, and say, for instance, "You have a fine wheat field, or a fine animal, or an improved washing machine, etc.", taking notice of the things that are good. One of the weak spots in extension work is that we do not pay enough attention to the good things people are doing. People really want to do more things that will cause them to stand out as individuals and be known among men and women. All of that appeals to them on account of the "I-ness" of the individual, the that which says "I want to be something", I do not care how many of us say, "I do not want credit for that" - every one of us would have

to admit that we like individual recognition. There is no exception. The extension agent should make his appeal to individual success a stong one.

Hoarding.- Another appeal to be used in extension work is that made to the instinct that cuases a person to save, or hoard. The small boy who has a little desk or drawer some place where he can put yellow glass, strings, etc., forgets that he has them, and why he put them there; yet the fact that he thought to put them there is a good omen. He had a very present reason when he put them there, although a few hours afterwards he had forgotten it. I do not think it is the squirrel's habit to hoard in order that he may have something to eat; he has the habit of hoarding, and it is because he has this habit that his life is carried through, since he has food in store. Man can add intelligence to that habit. He can hoard and save, but there is an economic aspect to his doing that. Man does this that he may have something to feed his children, to satisfy that "protect the race" instinct; that he may have money to send his children to school; that he may have a piano, a victrola, and many other home things. It is that saving tendency that we should take advantage of in order to get him to do certain things.

Imitation. - There is another instinct - a strong, impelling one - to do what other people do, to imitate. The Home Demonstration Agent has been putting on canning exhibitions year after year. The effect of these exhibitions may not be known the first year, but it is known that they have an effect. The second year she adds a few things and perhaps changes the style, but she keeps on having exhibitions, and after awhile somebody says, "They keep this thing before me so much that I believe I could try it." Then, they may reason, "Canning will make our health better and save money for us".

There are, then the following appeals we may use in extension work:

1. Appeal to the instinct of self-preservation.
2. The egoistic instinct which gives standing in society, and leadership.
3. The hoarding instinct.
4. The appeal to the tendency of everyone to do as others do.
5. The appeal to reason.

The Effect of Age upon Instinct.

The tendency to imitation predominates in early life. Persons appealed to should be given an opportunity to imitate what is presented to them. Self-assertion predominates in the second period; persons

should be given a chance for expression, and not repression. The third period is marked by the expression of the social tendencies. These first three periods must be appealed to in club work and plans should be made to appeal to young people because of these characteristics. There is a period in adults of from twenty-five to thirty-five years which is known as the missionary period. Young men and women leave college and it is their desire to teach, to pass on the information they have acquired. Here and there among this group are people who want to lead, and they should be looked to for leadership in most cases.

Suggestion versus Reason As a Factor in Extension Teaching.

People do things through the suggestion of rythm. For instance, they may hear the lines

> "Lime and lime without manure, makes both farm and farmer poor,
> Lime, manure and vigorous clover makes the farmer smile all over."

They may carry that home and put it into practice merely from sensing the rythm, the reason coming afterward.

It is desirable also that every extension worker think of certain physical conditions that may help the mind to receive a demonstration, a lecture, or an exhibit. Lighting, comfortable chairs, and position, temperature of a room, etc. are factors to be considered. These things add to the comfort and will add to the ability to think.

Continuity and Repetition as a Factor in Extension Teaching.

I want to call attention to one other fundamental. There must be a continuity of bringing impressions to people's minds, by publicity and other means. Publicity is the strong arm of appeal. "Stop, look and listen" is a direct appeal which brings forces into action. Then, with publicity articles, lectures and movies, we come to the demonstration, which we may follow with slides to fix the impression on the mind of the people. The story told to the people in the news item is also told in the field meeting, in slogans, rhymes and songs. There are also achievement days for the young and old. All of these things should be done over and over again.

Habits of Travel Determine Location of Demonstrations.

Some observations have been made which would hardly be dignified by the name survey, resulting in the establishment of certain average distances which people travel to the railway station, to the church, to school, and even to demonstrations, field meetings and lectures. It was found a few years ago that in northeastern United States the average distance travelled to an agricultural extension school and to a field demonstration was about 3 1/2 miles; in the north central States it averaged about 5 miles, while in some of the States west of the one-hundredth meridian it was about 10 miles.

Taking these distances as radii of circles around the demonstration, one might figure safely that in the more level agricultural parts of our country they should not be very far apart. Consideration should be given the travel habits of people. Are distances too great? Is the direction to the demonstration contrary to that which they usually travel to church, to the local market, the railway station or the school? Oft-times the necessity for contrary-wise travel prevents the individual from feeling the sense of ease or pleasure that should attend his going. Demonstrations may be so grouped that they are entirely too close together, and some other part of the community or county is unable to have an opportunity to observe them.

The Number of One Kind of Demonstration Assists to Determine the Adoption of a Practice.

The group-loving habits of man and his tendency to imitate is manifested by the effect on him of the mass of group. If there are but two or three demonstrations, he hears little of them and sees less, and the number affects him very little. If there are 25 or 50 in a county he is then affected by the number, even though he does not visit more than two or three of them, or sometimes only one of them. The number helps him to feel that he should do as others do, therefore the way to his accepting a practice is made easier. He feels a loyalty and responsibility to a group of which he desires to be a part, and he will defend himself many times by stating that there are many others doing the same thing that he is doing.

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- OUR JOB -

Habit, as related to agricultural activities, is one of the greatest obstacles in the path of adult extension work. A habit is acquired by frequent repetition and its facility of performance increases with its age. The older a habit becomes, the less power of resistance has the individual upon whom it has a hold. Keeping these facts in mind it may then be more easily understood why a certain operation carried on in a given way over a period of several years implies a settled disposition on the part of the person or persons engaged in promoting it. A disposition which is not easily swayed from the habitual practice, impractical and unproductive though it may be, because repetition of the same practice year after year has developed a certain skill and ease of performance which naturally increases resistance against the introduction of new methods and new ideas.

The work of a person engaged in agricultural extension is at least in part that of a "habit breaker." To induce a person or a group of persons to forsake a habitual and established custom requires salesmanship on the part of the extension worker and unless he has something to sell which harbors a strong appeal to reason, he will fail.

One weakness of some past extension work has been, that we succeeded in breaking for a time certain habits which our friends possessed and then offered them, in exchange for the old habitual practice, something which was not adaptable to their conditions. As a result they became disgusted with us as well as with our theory. Probably a greater weakness however has been our inability to really sell ideas which are both practicable and much needed.

If a proposed plan is a proved one and is sufficiently important to a community, especially from the economic standpoint, it can be made to replace most any long-established habit if it is presented over a period of years with sufficient momentum to overcome the natural resistance to change which the old habit contains. With this thought in mind, extension workers of today are doing the most effective work by presenting ideas to communities in the form of intensive, well-organized campaigns supported by clear-cut result demonstrations which in turn support methods that have been put to a test experimentally and have been found puncture proof.

- From Nebraska Animal Husbandry Extension Report. -

THE POWER OF HABIT

Neither law nor doctrine can effect any marked change in the habits of thought and work of mature, seasoned people of either sex in any State or country. That is a conviction which I should be glad to discard upon the receipt of convincing evidence of its unsoundness. Nothing in science or experience has been more positively demonstrated than that we are "creatures of habit." We are ruled by our habits. Habits of mind are formed by children between the ages of 3 and 16. What they see, hear, touch, smell and taste are the stimuli in response to which their habits are formed. Since some or all of the stimuli are bad in a high percentage of cases, it follows that bad habits will be formed. Boys and girls are either the beneficiaries or the victims of the habits of their parents and social environment. Habits perpetuate themselves through generations quite as definitely as hereditary characters or taints. New habits which a changeful world calls for are acquired so slowly by most people that they are antiquated before they are fixed.

- From the "Opinions of a Countryman"
by D. C. W. in the Breeders' Gazette.

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THE IMPORTANCE OF SPECIALISTS

We do not know just how important the extension specialist is in our extension program; but in a survey made in the four States of New York, Iowa, Colorado, and California, we find that, with only about 40 per cent as many specialists as county agents, 29 per cent of the farmers reported contacts with extension specialists, as compared with 59 per cent who made contacts with county agents; 24 per cent of the farms surveyed reported helpful contacts with the specialists, as compared with 68 per cent who reported helpful contacts with the county agents; 18 per cent reported practices changed due to specialists, as compared with 55 per cent who reported practices changed due to county agents. This would seem to be a very good showing when you remember that the specialist is supposed to deal more with project leaders and county agents than with the ultimate farmers.

- From a recent paper by Dr. C. B. Smith,
Chief, Office of Cooperative Extension Work.

TON-LITTER COMMENTS

With 767 official ton litters reported in 1925 from 327 counties in 26 States, little more is necessary to indicate the success of this project. When it is further considered that approximately 1,500 other litters were entered, many of which missed the goal by small margins, and that each litter regardless of the final outcome was a demonstration for better feeding, breeding, and management practices in swine production, the full influence of the work is impossible to measure.

Illinois, with 122 qualifying litters and Pennsylvania with 121, are the leaders this year. If some means is not devised to keep Smith and Havner from rooming together at every opportunity, it may be difficult or impossible to dislodge these States from their position at the top of the ladder.

James R. Wiley of Indiana, launched the first organized ton-litter work under the name of the Hoosier Ton-Litter Club in 1922 so that the project is only 4 years old. However, it is only fair to state that the idea was probably in the back of P. G. King's head for some time previous to that.

Reports indicate that practically every State, carrying the project in the past, is continuing it with even more vigor and in addition several new States have adopted it for attention this year.

It is apparent that feed records are important in advancing the work, particularly in some sections, for as one specialist stated, "All of our contestants who did not keep records are certain they lost money, while everyone who kept records can prove that he made money."

The following pertinent excerpts are taken from the annual reports of the specialists -

Kentucky - "Of 115 farmers who entered litters, 52 fed them out; 45 of these made the goal. The average cost of the pork produced was about $8.32 per hundredweight.

Ohio - "At no time has this project been considered a contest and no special credit is given for litters weighing in excess of a ton. In three years' work, 52 counties, involving approximately 400 owners, each of which conducted a demonstration, have been reached."

Colorado - "Twelve of the 19 litters which reached the goal had no death loss and in practically all instances their owners fed a balanced ration

supplemented by a protein concentrate and had legume pasture."

Illinois - "439 farmers nominated litters and one out of each 3 1/2 litters entered made the official goal. One litter weighed 4,789 lbs. and another 4,711 1/2 lbs."

Georgia - "Our heaviest litter had green forage until the drought. Another qualifying litter on which feed records were kept showed a cost of about 6¢ per pound."

Louisiana - "The feed costs on the three litters that reached the goal were reported as averaging $.038 per pound."

Pennsylvania - "Every ton litter during the two years' work was made at a profit and has convinced the 359 farmers enrolled and their neighbors, that it is essential to use ton litter methods if pork is to be made at a profit in this State."

Minnesota - "The work demonstrated that purebred hogs are more highly developed machines for converting farm crops into pork than are scrubs and grades. Most of the scrub litters fell by the wayside and it took them 8 to 9 months to reach market weights, while many of the purebred litters were ready at 5 months. It also taught farmers that pigs crowded for the early market make the cheapest gains and bring the most money, much less feed is required for maintenance and risks from disease and accident are lessened."

Oklahoma - "Some of the best hog men have contended that on an average the most rapid gains are the most economical. Our ton litter results seem to offer positive proof for this contention. The largest average daily gains made in the 1925 contest were the most profitable. The average cost of producing 100 pounds of pork in 1925 was $7.92, as compared with $6.85 in 1924."

Tennessee - "The average cost per 100 pounds of pork produced in 1924 was $6.50. In 1925, feed being higher, the cost was increased to $7.48. It took on the average, 351 pounds of grain to produce 100 pounds of pork. A balanced ration and rapid feeding are the points we are stressing, since these methods have shown substantial profits, while ordinary farm methods of feeding have brought losses."

Idhao - "The average feed cost per 100 pounds of gain on the 8 litters attaining the goal was $6.66 and the average daily gain was 1.24 pounds per pig.

One worker registers complaint concerning the practice of permitting nurse sows, which he understands is done in some instances.

The worth of the project as a teaching agency is well stated by William G. Ogilvie who says - "Most of us are 'eye-minded' as well as 'ear-minded' and as eye-witnesses to these demonstrations, every farmer is challenged to 'go thou and do likewise.' It puts the farmer in the position of the student demonstrator, with the hog lot his laboratory. In short the ton litter is a great visual demonstration and as such, is a teacher of the most impressive sort."

The tabulated data, on the following page, present a picture of ton litter results to date.

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ARMOUR'S LIVESTOCK BUREAU

It is presumed that all of you regularly receive the "Monthly Letter to Animal Husbandmen", issued by the above named division of Armour and Company at Chicago. The information which it contains is of great value and will be of use to any livestock worker.

The same organization has also published booklets on the subjects of "Marketing Livestock and Meats", "Progressive Beef Cattle Raising", "Progressive Hog Raising" and "Progressive Sheep Raising".

If you are not on the mailing list to receive these publications, it is suggested that you communicate with Colonel E. N. Wentworth, who is director of that bfanch of Armour and Company at Chicago.

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State	Litters entered. 1/	Litters weighing ton or more at 180 days old. 1/	Counties represented in entries.	Counties represented in ton litters	Average weight of ton litters.	Average pigs in ton litters.	Weight of heaviest litter.	Pigs in heaviest litter.	Percentage of purebred ton litters. 1/	Percentage of ton litters sired by purebred boars.	Cost of production records kept. 2/	Ton litter hogs used in future breeding work. 2/
					Pounds		Pounds		Per cent	Per cent		
Arkansas	5	3	5	5	2269½	11.3	2300	12	66.6	100	Yes	No
Colorado	137	19	13	10	2470	11.3	3594	12	42	84	Yes	No
Georgia	10	6	9	5	2478	9.8	28½2½	11	100	100	Yes	Some
Idaho	22	8	12	7	2384	10.6	2660	12	87.5	100	Yes	No
Illinois	430	122	56	45	2396	11.+	4789	16	78+	94+	Yes	Yes
Indiana	3/ 250	83	50	34	2314	10.3	4080	15	79.4	100	Some	Yes
Iowa	3/ 100	27	20	13	2242	10.3	3080	12	80	99	No	No
Kansas	8	3	4	2	2292	10.6	2450	11	100	100	Yes	Yes
Kentucky	115	46	22	17	2306	10.3	4323	12			Yes	Yes
Louisiana	37	3	10	3	2121	10.6	2275 4/	10	100	100	Yes	Yes
Maryland	9	2	---	2	2000+	9.5	-----	9	-----	-----	-----	-----
Michigan	67	18	23	11	2428	10.8	3025	13	50	100	No	Some
Minnesota	275	79	57	40	2499	11.3	4250	14	70	76	Some	Yes
Mississippi	14	2	5	2	2439	11.	2594	12	50	100	Yes	Yes
Missouri	---	34	---	---	2323	10.6	3306	13	---	94+	-----	-----
New Mexico	6	0	1	---	-----	-----	-----	-----	-----	-----	Yes	Yes
North Carolina	7	1	3	1	2722	12.	2722	12	100	100	No	Yes
North Dakota	69	3	21	3	2050	9.6	2086	9	100	100	-----	-----
Ohio	127	34	45	18	2486	9.8	4409	14	85	100	Yes	Some
Oklahoma	70	21	35	13	2525	10.6	4075	17	94	94	Yes	Some
Oregon	18	5	6	3	2325	10.6	2710	12	100	100	Yes	No
Pennsylvania	256	121	43	35	2287	10.1	3182	13	57	95	Yes	Yes
South Dakota	37	8										
Tennessee	185	66	30	21	2320	10.1	3701	13	60	99.1	Yes	No
Texas	37	17	23	15	2467	10+	3236	12	88	100	Yes	Yes
Virginia	31	5	13	4	2326	11.	2897	14	100	100	Yes	Yes
Wisconsin	75	31	26	18	2322	10.8	3124	12	71	100	Yes	Yes
Wyoming	1	0	1	0	1483	12.	1483	12	100	100	Yes	Yes
	2398	764										

Some Recent State Bulletins

The following are among the late State publications of interest to livestock extension workers.

"Feeding Work Horses" by M. W. Harper - Cornell University Bulletin No. 437.

"Hitching Horses to Get the Most Work Done" by Lehmann and Robbins - University of Illinois Circular No. 283.

"Preliminary Experiments in Feeding City Work Horses" by J. A. Simms - Storrs (Conn.) Agricultural Experiment Station Bulletin No. 132.

"Big Teams in Montana" by W. L. Wilson - Montana State College Extension Service Bulletin No. 70.

"Buying and Feeding Cattle" by Beresford and McDonald - Iowa State College Extension Service Bulletin No. 117.

"Feeding Beef Cattle" by Paul Gerlaugh - Ohio State University Extension Service Bulletin.

"The Range Bull" By C. U. Pickrell - Arizona Extension Service Circular No. 51.

"Cattle Feeding in Relation to Farm Management" by Case and Myers - Illinois Experiment Station Bulletin No. 261.

"Sheep Production in Colorado" by C. I. Bray - Colorado Experiment Station Bulletin No. 304.

"Observations on Range Sheep Management in New Mexico" - New Mexico Agricultural Extension Service Circular No. 80.

"Sheep and Their Care" by Griswold and McMahon - North Dakota Agricultural Extension Service Circular No. 69.

"Feed Requirements and Cost of Gains of Spring and Fall Pigs" by Ferrin and McCarty - Minnesota Agricultural Experiment Station Bulletin No. 213.

"Feeding Pigs on Pasture" by J. B. Rice - Illinois Agricultural Experiment Station Bulletin No. 247.

"Hogging Down Corn and Soybeans" by L. A. Weaver - Missouri Agricultural Experiment Station Bulletin No. 224.

"Farm Sanitation" by G. S. Weaver - South Dakota Agricultural Extension Service Bulletin No. 138.

Mention will be made in these columns from time to time of future bulletins of State origin, if copies of same are submitted.

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Purebred Arithmetic.

"I am not strong on arithmetic," said the purebred sire, "but I can add to the bank account of the man who owns me; I can subtract from the principal of his mortgage; I can multiply his chances for success; I can divide his cares and worries; I can give more interest to his work; and I can discount his chances for loss."

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W I S D O M

A man should never be ashamed to say he has been in the wrong, which is but saying, in other words, that he is wiser to-day than he was yesterday.

-- Pope

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A CAR-LOT BABY-BEEF PROJECT

During the past year a new project in beef production was launched in Minnesota. It is known officially as the Minnesota Car Load Baby Beef Contest.

Its objects are, to encourage the marketing of beef cattle at an earlier age, to locate demonstrators who will act as local leaders in extending all better beef-production practices and to establish goals and standards in beef production, all to the end of improving the status of the beef-cattle industry.

The rules and regulations may be briefly set forth as follows:

Enrollment

1. Any farmer in the State is eligible to enter.
2. Calves entered must be bred and fed by the contestant.
3. A "car load" is designated as 15 head.
4. Calves entered shall be dropped between January 31st and August 1st of the same year.

Breeding

1. All calves entered shall be sired by a purebred bull recorded in either the Aberdeen-Angus, Galloway, Hereford or Shorthorn herd books.
2. All calves entered shall be the produce of cows showing characteristics of one or more of the above breeds.

Identification and Nomination

1. Each calf entered shall be individually ear-marked within 30 days after birth.
2. A certified record of such marking together with the exact age and full description of each calf, together with the identification of its sire and dam shall be furnished before the calf is 30 days of age.
3. Each contestant may nominate as many as 20 calves and have the privilege of selecting the required 15 head from them at the close of the contest.

Inspection

1. Each calf entered shall be inspected within 30 days after birth by the county agent and another disinterested party.

Feeding Practices

1. The use of nurse cows is prohibited.
2. No other limitation is placed on methods of feeding.

Feed Records

1. Each contestant is required to furnish the following information:
   (a) Rations fed the dams of calves from breeding to calving and from calving to weaning.
   (b) Pasture used.
   (c) When calves were started on feed.
   (d) Kind and amounts of feed used (estimates only).
   (e) Feed-yard equipment.
   (f) Feeding and management methods followed.

Weighing

1. The weighing committee shall consist of two or more disinterested parties.
2. Calves should be weighed when they average 450 days of age. If impossible to weigh at this time, they must be weighed within 5 days of such date and 2 1/2 lbs. per calf per day added to or subtracted from the weight for adjustment to age requirement.

Awards

1. Awards will be based entirely on final weights, the heaviest carload at 450 days of age being the winner of first prize and so on.

This contest has the approval and support of the beef-cattle producers associations of the State, the packing interests, the stock yards, the livestock commission merchants and other organizations, from which the prize money is provided.

The goal for the first year was set at 30 entries, however 41 were obtained with a total enrollment of 615 calves. The first contest will end this fall.

Comments

There are many attractive features to this undertaking. It undoubtedly furnishes a basis for doing effective work. Many things will be learned as to how it may be modified as time goes on. Some objections to certain requirements or lack of them, even now may be evident, but it is believed that it may possess possibilities of doing for beef production, what the ton litter work has done in its field. It is therefore commended to the attention of all those who may apply its principles to their own field of activity.

Mr. A. A. Dowell of the agricultural extension service of Minnesota at St. Paul, will be glad to furnish more information to anyone interested.

"Do You Know GOOD BEEF?"

The poster which the Department recently issued under the above caption has been very popular. Retail meat dealers, cattlemen, packers, bankers, hotel proprietors, in fact all classes of people having to do with the beef-cattle or meat industries, have requested copies.

Samples have been sent to the animal husbandry specialists and the county and home demonstration agents. If, for any reason you have not seen the poster or are in position to use an additional supply, your needs will be given attention if you will write this office.

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COOPERATION

You have a dollar; I have a dollar;

We swap.

Now you have my dollar; I have your

dollar;

We are no better off.

You have an idea; I have an idea;

We swap.

Now you have two ideas; I have two ideas;

Both are richer.

What you gave you have; what I got you did

not lose.

This is cooperation.

-- Author Unknown.

NEW TEXT BOOKS

The following books of interest to animal husbandmen, have been published recently:

"Meat and Meat Products" by W. H. Tomhave - $3.00
Published by J. B. Lippincott Company, Philadelphia, Penn.

"Animal Breeding" by L. M. Winters - $2.50
Published by John Wiley & Sons, New York, N. Y.

"Beef Cattle - Their Feeding and Management on Corn-belt Farms" by R. R. Snapp - $4.00. Published by John Wiley & Sons, New York, N. Y.

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TWELVE GOOD THINGS TO REMEMBER

1. The value of time.
2. The success of perseverance.
3. The pleasure of working.
4. The dignity of simplicity.
5. The worth of character.
6. The power of kindness.
7. The influence of example.
8. The obligation of duty.
9. The wisdom of economy.
10. The virtue of patience.
11. The improvement of talent.
12. The joy of originating.

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WOOL-IMPROVEMENT PROJECT

By H. A. Lindgren, Oregon.

Purpose

Owing to the change in conditions of the range area it is apparent that success in the sheep business will hinge on efficient production. In other words every ewe that is kept in the breeding band should show a paying crop of wool each year. It has been found that the weight of fleece varies greatly with the individual sheep. There are little or no experimental data to show the effect of culling on the weight of fleeces. However, with dairy cows and poultry, it has been very definitely demonstrated that by the process of elimination of the lower-producing individuals, the production of the herd or flock has been materially increased. It is safe to predict that the same result can be attained with sheep.

It is, therefore, the purpose of this demonstration to show that the returns from the ewe band within certain limits can be increased by careful culling of the individual sheep each year and mating the higher producers with rams carefully selected and also high producers of wool.

Plan of Procedure

Bands of not more than 1,600 each of range ewes will be selected in eastern Oregon. The owners of the bands selected must be such as will agree to the plan of the demonstration and to dispose of such ewes as do not come up to the standard set for weight or fleece, before the next year's shearing time. The selection will be done by the Extension livestock specialist in cooperation with the county agent.

The demonstration will extend over a period of five years' time.

The ewes will be shorn as near the same time each year as practicable.

Weights will be taken of each fleece at time of shearing and such weight recorded. All ewes that do not come up to the standard set will be branded with the letter - S - all that shear more than the standard weight will be branded with the letter -L-.

The standard weight used will be decided by the cooperators. Blanks suitable for recording the data will be supplied by the Extension Service. The blanks will be made out in six copies, one for the owner, one for the county agent, one for the extension specialist in animal husbandry, one for director of extension. one for the Animal Husbandry Department at Oregon Agricultural College and one for the secretary of Oregon Wool Growers Association.

The extension specialist with the county agent will be present at time of shearing and will assist in recording the data. He will also give whatever assistance is necessary in the selection of the rams to be used.

Additional information will be gathered of the yearly average weight of the fleece of at least 10 bands selected at random in the community, during the continuation of the demonstration.

The facts obtained will be charted showing figures on results. This will be given publicity through the press and in meetings.

This demonstration began with the 1923 shearing season. The selection of the cooperators will be made during the fall and winter months.

In order to illustrate how the plan works out, the following data from one of our cooperators are appended.

Statistical record of operations on the Ned Sherlock ranch

	1923	1924	1925
Shearing dates	May 14-17	May 2-6	May 15-19
Total sheep sheared	1,545	1,651	1,612
Culling standard, pounds	7	7.5	8
Number shearing below standard	241	170	150
Number shearing above standard	1,304	1,481	1,462
Total wool weights	12,825.5	16,309.2	16,107.2
Average fleece weight	8.3	9.87	9.9
Average for sheep shearing above standard	8.72	10.21	10.27
Per cent branded for culling	15.7	10.2	9.3
Heaviest fleece weight	13.5	15.8	16.7
Lightest fleece weight	3.5	2.5	3.5
Number shearing above 10 pounds	180	465	771
Number shearing from 4 to 4.9 pounds	15	6	0
" " " 5 to 5.9 "	38	16	10
" " " 6 to 6.9 "	181	62	37
" " " 7 to 7.9 "	406	236	101
" " " 8 to 8.9 "	409	423	301
" " " 9 to 9.9 "	316	415	390
" " " 10 to 10.9 "	130	278	365
" " " 11 to 11.9 "	33	120	242
" " " 12 to 12.9 "	14	51	108
" " " 13 to 13.9 "	3	16	35

It will be observed that the band was maintained at a comparatively even number each year. As the old ewes were culled they were replaced by yearling ewes from the band.

The standard weight of fleece, starting at 7 lbs. in 1923, has been increased at the rate of one-half pound per year for the past three seasons.

The average fleece weight of the stud rams was about 21 pounds.

It is significant that the number culled each year has decreased although the standard weight has increased.

The number of ewes shearing more than 10 pounds has progressively increased.

A marked improvement in the apparent uniformity of the band has resulted from the culling.

The results thus far are of value in showing that wool improvement is greatly hastened by culling the light-shearing ewes and using heavy-shearing bucks.

The work is being accepted by the sheepmen over a wide area. The results have been charted and presented before 38 meetings of sheep raisers and besides has been printed by practically all the agricultural and news papers of the State.

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CLASSES OF MEN

"Men are four: He who knows not and knows not he knows not, he is a fool -- shun him; he who knows not and knows he knows not, he is simple -- teach him; he who knows and knows not he knows, he is asleep -- wake him; he who knows and knows he knows, he is wise -- follow him."

-- Arabic maxim.

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Publications of the U. S. Department of Agriculture

It is the intention to see that all livestock publications of the Department promptly get into the hands of the field workers who may be interested in them.

Some of the productions recently distributed are "The Agricultural Outlook", "Food Animals and Meat Consumption" and "Methods of Extension Teaching". Your especial attention is called to the last named which is a mimeographed publication by H. W. Hochbaum. It contains much food for thought and basis for action. Additional contributions on this subject will be presented from time to time since effective extension methods seems to be the big problem among all extension workers.

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B A L A N C E D

Knowledge of production alone may make a man a slave.

Knowledge of distribution alone may make a man a plutocrat.

Knowledge of consumption alone may make a man a parasite.

Knowledge of all three makes a man an effective citizen of democracy.

— Glenn Frank.

LOOKING AHEAD

The next issue probably will contain additional material on extension methods, some excerpts from the 1925 annual reports of the State workers and such other information of value that comes to hand.

It is hoped that we may receive special contributions from the field, on subjects of more or less general interest. If you have found something that has helped you in your work, send it in, for likely it will be of similar assistance to other members of the "family". If you have questions to ask or topics for discussion to suggest, let us have them. Some of the contributions we should like to receive are the following:

"Our Experience in Conducting Judges' Training Schools" by Wuichet.

"How Community Swine Associations have helped our hog work" by Madison.

"Practical Hog Feeding and Marketing" by Shay, Brant, etc.

"How Nebraska's Brood Sow 'Mileage' is being Increased" by Posson.

"How McLean County is Spreading over the State" by Robbins.

"Better Sires Trains" by Fairbanks.

"Putting Livestock Production on a Business Basis in Idaho" by Rinehart.

"How I got a Livestock Movie without Cost" by Pickrell.

"Feed Lot and Pasture Demonstrations" by Beresford, Dowell, Richardson, etc.

"Certified Flocks" by Miller, Freeman, etc.

"Junior Livestock Clubs" by Coe, Barnes, etc.

"How to Succeed with Colt Clubs" by Vial, Hubbard, Brown, etc.

"Standardization of Lambs" by Flanery, Harper, Lawson, etc.

There are dozens of other activities that might be mentioned, but space does not permit. In any event, let us have your reaction to this innovation, whether it is favorable or otherwise, for it is our purpose to respect the wishes of our readers.

Address all communications to

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